

## Department: Technology Services

### Contribution to Montgomery County Results:

The mission of the Department of Technology Services is to use information technology to enable our employees to provide quality services to our citizens and businesses, deliver information and services to citizens at work, at home, and in the community, and increase the productivity of government and citizens.

| What DTS Does and for Whom   | How Much  |
|--|---|
| <u>Enterprise Systems and Operations (ESOD)-</u><br>Design, implement and maintain a secure and reliable computer-based hardware, software, and data infrastructure for County business systems and County staff.  | <ul style="list-style-type: none"><li>• \$11,338,940</li><li>• 26.4% of total budget</li><li>• 37.0 WYs</li></ul> |
| <u>Enterprise Telecommunications and Services (ETSD)-</u> Design, deliver, implement and support network, voice and other communications solutions for County Government departments and numerous Agencies.  | <ul style="list-style-type: none"><li>• \$4,489,880</li><li>• 10.4% of total budget</li><li>• 13.7 WYs</li></ul>  |
| <u>Enterprise Applications and Solutions (EASD)-</u><br>Deliver and maintain communication solutions through core business, web based applications and geographic information solution services; oversight of Desktop Computer Modernization (DCM) and the County's Help Desk.   | <ul style="list-style-type: none"><li>• \$8,377,340</li><li>• 19.5% of total budget</li><li>• 34.3 WYs</li></ul>  |
| <u>Office of Cable and Communication Services-</u><br>Manage the County's cable television franchises ensuring high quality services; manage the Cable Communications Plan to provide funding for quality Public, Educational, and Governmental (PEG) programming, FiberNet, franchise enforcement; support the County's and consumers' interests in cable, broadband and telecommunications federal and state proceedings; and facilitate the management and coordination of wireless transmission facilities siting. | <ul style="list-style-type: none"><li>• \$10,911,900</li><li>• 25.4% of total budget</li><li>• 25.8 WYs</li></ul> |
| <u>Enterprise Project Management (EPMD)-</u><br>Provide strategies for the development and delivery of County technology solutions for both County staff and residents.  | <ul style="list-style-type: none"><li>• \$2,612,700</li><li>• 6.1% of total budget</li><li>• 11.7 WYs</li></ul>   |
| <u>Office of the Chief Information Officer (CIO)-</u><br>Provide technology leadership, allocation of resources, policy development and oversight of all programs of the Department and County government Information Technology initiatives including Technology Modernization Program. Oversee County IT Security program.   | <ul style="list-style-type: none"><li>• \$5,272,520</li><li>• 12.3% of total budget</li><li>• 31.8 WYs</li></ul>  |
| Overall (Gross budget to include Operating Budget and Cable Fund Budget)   | <ul style="list-style-type: none"><li>• Total Budget: \$43,003,280*</li><li>• Total WYs:154.3*</li></ul>          |

\* **Total FY11 budget and work years include DTS General Fund (\$26,370,280); Non-departmental Account Desktop Modernization (\$3,180,950), Cable Fund (10,911,900; 25.8 WY's), and some personnel costs for Technology Modernization Program (\$2,835,660).**

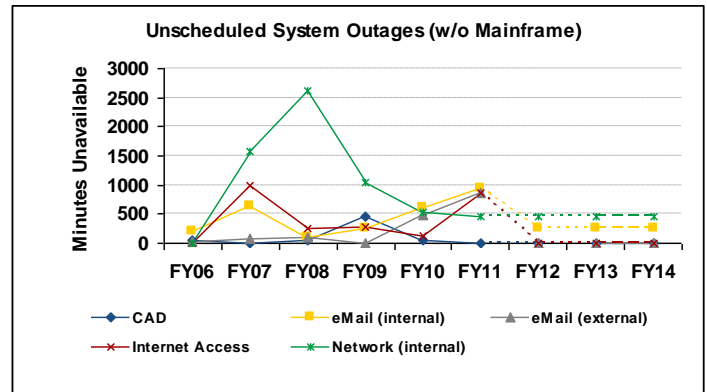
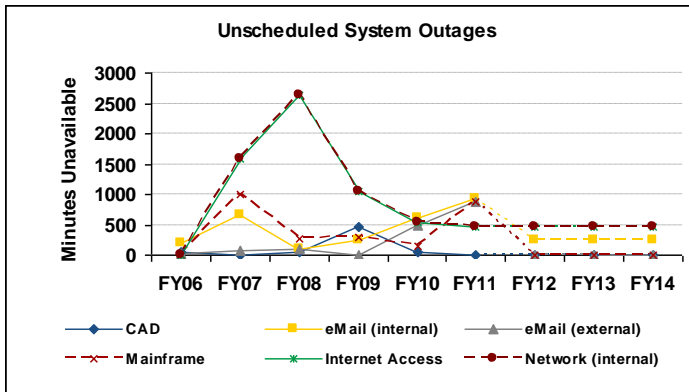
\* **FY11 actual includes savings targets for DTS (-\$263,700); DCM (-\$88,890), and Cable Fund (-\$104,920).**

## Headline Performance Measures

(All measures assume no significant change in support plan, enhancement or significant additional funding for out-year forecasts unless otherwise noted)

### Measure #1 Unscheduled System Outages

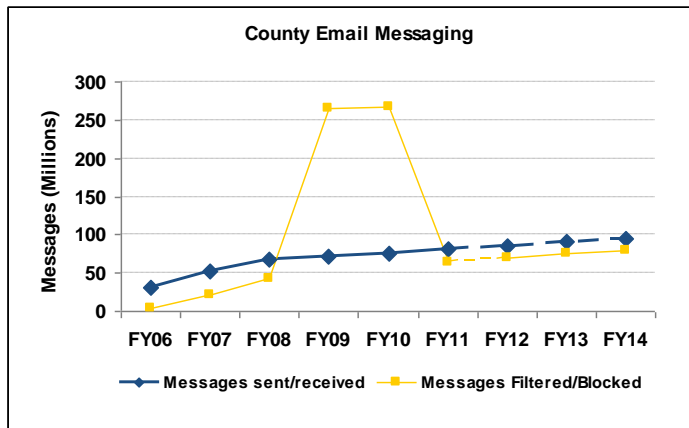
Number of Minutes Certain County IT Systems are Unavailable



Outages are system events that render applications un-available. These counts do not include regularly scheduled maintenance activities. Regular maintenance activities and proactive management reduces duration of unplanned outages

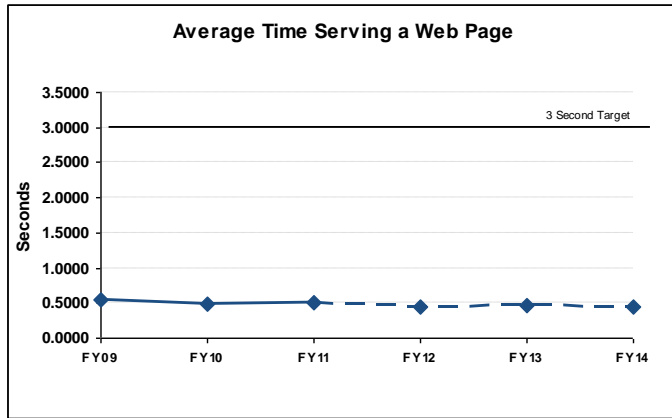
### Measure #2 County Email Messaging

- Number of Email Messages Sent and Received
- Number of Email Messages Filtered or Blocked



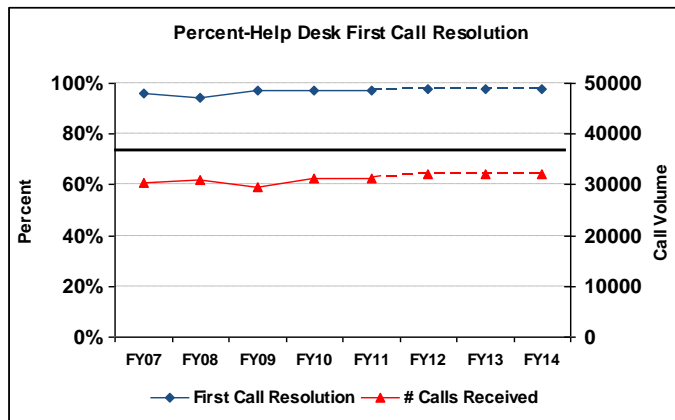
This measure identifies how email services are managed to ensure valid delivery of inbound and outbound messages. Projections still assume no major additional infrastructure or application increases (e.g. CRM), but assumes an increase in both SPAM growth and user base. With CRM implementation complete, estimates will be adjusted during FY11 if projections and assumptions warrant changes.

### Measure #3 Average Time to Serve a Web Page



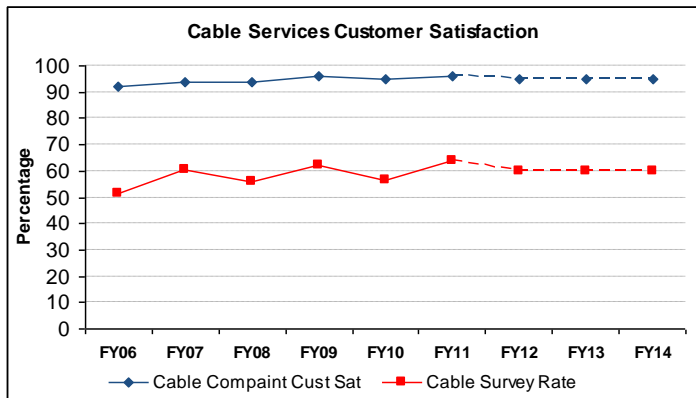
This represents the average time it takes from the point the server got the page request until it transmitted all the data. The decrease in service time is a direct influence of the use of tools, testing and development to ensure information rendering by end users is kept to a minimum.

#### Measure #4 Percent of DTS Help Desk Requests that are Resolved on the First Call



Statistics illustrate the level of First Call resolution against overall call volume. This measure also includes the required service level for First Call Resolution.

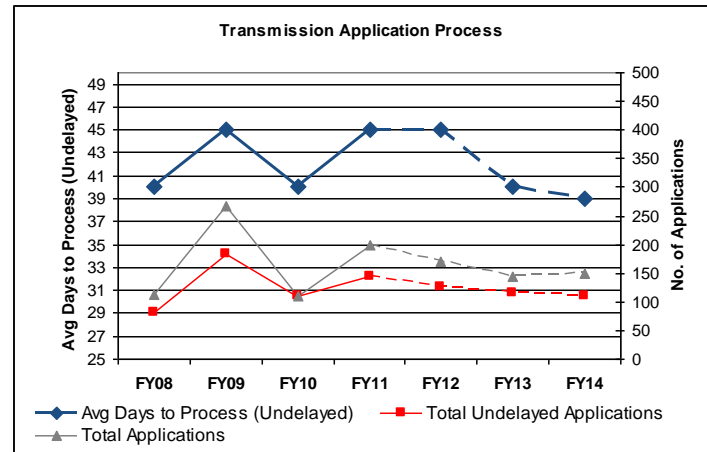
#### Measure #5 Percent of Customers who are Satisfied with Cable Office Complaint Handling



Survey of Cable services is based on distribution to 100% of all Cable customers that filed a complaint. Satisfaction is focused on services provided by the Cable Office in complaint handling, not services provided by Cable providers.

## Measure #6 Transmission Facilities Application Process

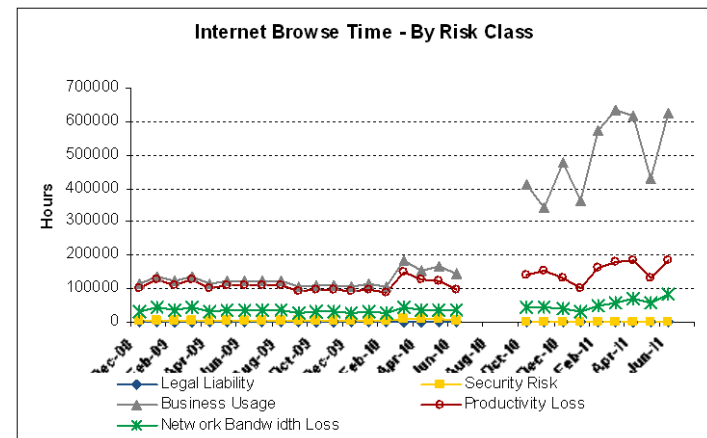
Level of Effort for Transmission Facilities Application Review and Approval



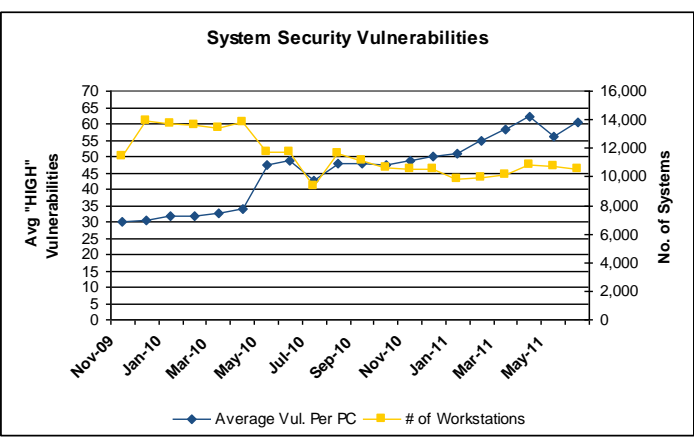
This measure demonstrates the Cable Office activities on Communication Transmission Facilities Application Processing. Performance indicators provide visibility into the efforts to meet application process reviews and approvals for new transmission facility siting requests.

## Measure #7 Security

- Internet Browser Risks
- Workstation Security Vulnerabilities

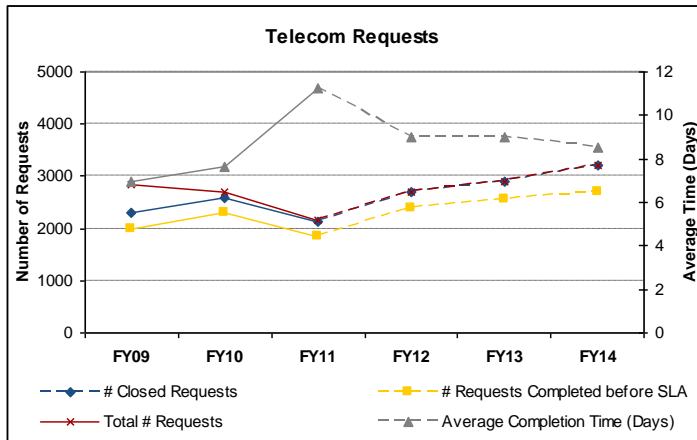


This provides the tracking of internet use by County systems relative to the classification of risk identified by internet security services.



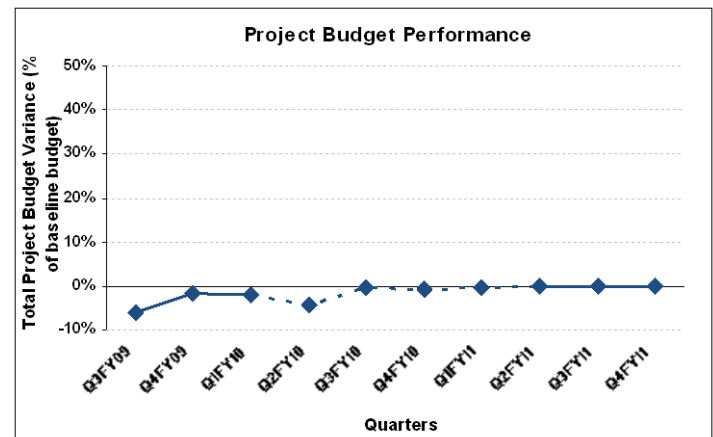
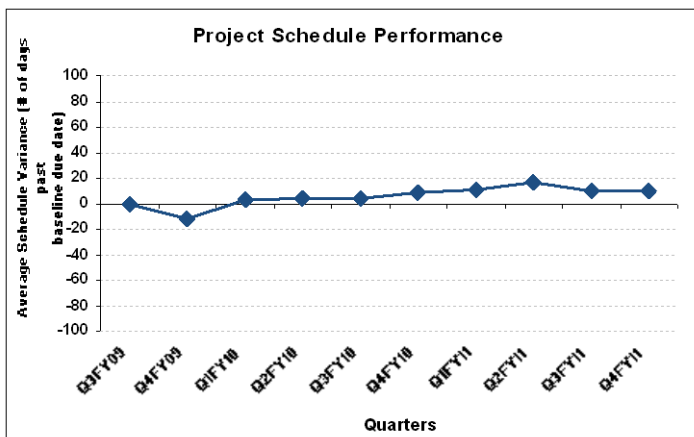
This provides the results of the ongoing County effort to minimize the impact of security vulnerabilities on county computers. While the Security team and DCM resources manage through updates and patches, new issues relative to new instances occur continuously. This measure provides a snapshot of the average number of security vulnerabilities, using the County's scanning solution.

## Measure #8 Average Time to Respond to Telecom Service Requests



This measure provides telecom services to internal County users. The measure includes the number of closed service requests on an annualized basis; the number of requests handled within the service level goal and average completion time for requests and is placed in comparison to the total number of requests.

## Measure #9 Enterprise Project Management Measures



This represents the Average Schedule Variance Days for all dashboard projects, using last day of month for each quarter value and including projects completed within that quarter. The measure demonstrates a compares actual/projected end date to last approved baseline end date.

This represents the Average Projected Project Variance Percentage for all dashboard projects, using last day of month for each quarter value and including projects completed within that quarter. The measure compares projected project cost (incurred + estimate to complete) to the authorized budget.

## Story behind the performance:

(Listed in priority order, by category)

### Contributing Factors:

1. *Executive and Legislative support on technical innovation that places Montgomery County in a leadership role at a national level. (Governance)*
2. *Improved focus on Project Management results through a comprehensive review process, program / project prioritization and the establishment of a formalized reporting (scorecard) methodology. (Governance)*
3. *Federal funding initiatives and programs (ARRA) in support of advancing current broadband programs and increasing County communications capabilities (Funding)*
4. *Implementation of Modern Technology solutions and retirement of antiquated, obsolete systems (Mission, Funding and Governance).*
5. *Use of improved technologies, open software solutions,, industry best practices and the embrace of an Enterprise Technology Strategy that builds on existing tools, standards and methods for new implementations (Governance)*
6. *Proactive role in the management of cost competitive cable services which expands County programming to residents (Revenue)*
7. *Technology innovation support by County leadership that recognizes the benefits of technology for both business and constituents (Governance)*
8. *Outreach to vendors and partners to make considerable changes to pricing and maintenance models to lower County IT sustainability costs (Funding)*
9. *Citizen demand, response and increase in utilization of technology driven solutions for government services (remote applications, revenue transactions and quest for County Information) (Web Usage)*
10. *Decreasing cost of new technologies making expansion feasible without significant changes to budget (Funding)*
11. *Focus on hiring and maintaining a dedicated staff with clear services goals and desire to provide innovative, useful solutions for county departments and residents (Customer Satisfaction)*
12. *Sustained annual investment in technology modernization and increased demand for Web solutions by county employees as well as citizens (Web Usage)*

### Restraining Factors:

1. *Providing funding to maintain positions and retain highly trained IT professionals that lead the transformation to newer technology (Funding and Customer Satisfaction).*
2. *Workforce constraints as a result of multiple enterprise implementations that impact existing operational requests and small-medium projects where staff duties are reprioritized, positions are transitioned to project duties and back fill of functionality or knowledgebase is not viable (Human Resources and Funding).*
3. *Continued or increased investment required for oversight and maintenance of security solutions to avoid putting county intellectual assets at risk (Funding).*
4. *Affect of operating funding reductions on existing systems that result in outages due to delayed replacement of aging infrastructure (Funding).*
5. *Reductions in operational support funding and associated resource reductions provide challenges in meeting customer expectations, the ability to maintain enterprise maintenance responsibilities and may lead to the development of additional siloed solutions, in direct contrast to enterprise investments. (Funding).*
6. *Technology innovation improvements requested by County leadership far outpace departmental implementation*

capabilities as a result of fiscal challenges (Funding and Customer Satisfaction)

7. *Decrease in Cable Franchise Revenue requires continuous monitoring FCC regulatory changes as well as repayments from prior year allocations back to the Cable Fund reserves (Funding)*
8. *Decrease of DCM PC replacement funding to zero for the year and the reductions from the past several years will create a significant challenge for seat management programs and the impending upgrades to Windows 7 as Windows XP reaches end of life in 2014 as well as vulnerability management, employee productivity and alignment with newest applications and desktop solutions (Funding and Customer Satisfaction)*
9. *Increase of newer, more complex solutions requires correlating investment to avoid reliability risks and the lack of actions in support of planning and quality control measures will inhibit integration options in this complex environment. (Funding, Operations Reliability and Customer Satisfaction)*
10. *De-centralized technology services will inhibit successful standard baseline solution implementations and create unnecessary support costs, across the enterprise (Funding and Operational Reliability).*
11. *Continued lack of a business impact analysis plan supporting enterprise technology solutions that supports the continuity of operations plan (COOP), driving both the implementation of high availability and disaster recovery solutions and have a more significant impact on costs in an “unusual event” (Funding)*
12. *Legacy technology solutions residing on the County’s mainframe are inflexible and require significant development and investment for information integration and will require increase operational costs until upgraded or replaced (Funding and Operations Reliability).*
13. *Email services project a licensing cost impact for user growth. Virus/Spam will continue to increase requiring current or additional investment. Shared and internet based (SaaS, PaaS) services options offer alternative delivery without clear understanding of new risks, challenges or customer satisfaction impacts (Funding).*
14. *Requirements to improve tower applications processing is directly influenced by volume, accuracy and completeness of applications. As new providers enter the marketplace, application volume tends to swell and approval process can be prolonged.*
15. *Increased focus on the provision of GIS solutions – GIS application requirements have increased significantly and new/updated applications are continuously in demand. GIS enterprise strategies are being reviewed with other County agencies as well as other jurisdictions while current GIS operational demands continue. (Funding; Operational Reliability and Customer Satisfaction)*
16. *Inability to remove gaps in skills as a result of the implementation of new enterprise solutions, reduction in training funding and the need to manage learning curve challenges (Funding and Training).*

## **What we propose to do to improve performance:**

### *Technology Modernization:*

1. *Continue a reasonable deployment of state of the art desktop hardware (DCM), software and productivity solutions to keep County employees working efficiently, with a minimum of maintenance delays – Requires restoration of original funding (Future state will require a significant increase in funding due to FY09, FY10 and FY11 reductions to address existing infrastructure, seat modernization (Windows 7) as well as additional funding with the expansion of infrastructure; Public Safety systems and/or external elements, beyond County control) [Funding].*
2. *Continue to refine application and hardware portfolios, building on prior year discovery assessments, COOP development and the TechMod implementation/retirements, to determine what investments provide the most benefits – Efforts will require commitment of financial resources to complete system solution improvements via TechMod programs to reduce long-term operating and support costs from retired systems, outdated technology [Funding].*
3. *Continue joint efforts on information sharing with other agencies through managed and governed technical solutions (including Executive sponsored Cross Agency Resource Sharing (CARS) program – Requires focus on uncontrolled implementation of disjointed information solutions that will increase cost of technology through*

*duplication and unnecessary diversity [Funding].*

4. *Continued emphasis on innovation where business benefits can be clearly articulated through process improvement, expedited services delivery and/or positive return on investment. – Innovation investment presents risk and mitigation or understanding of this risk will be a business (not technology) decision. [Funding and Risk Management]*
5. *Expand the use of technology automation tools and utilities to enhance support of existing systems (e.g. SMS for software delivery and remote support) – Requires additional investment in enterprise tools, with potential savings offset by the support of additional users, endpoint devices as well as internal resource constraints [Funding].*
6. *Telephone System Upgrades and Enhancements – Telephony infrastructure investments have been made to provide for upgrades to the voice systems to improve, expand and enhance services to County staff. Modernization continues to include changes to the Voicemail system as well as the completion of the enhancements use of 311 digits (wired line and wireless) in support of the MC311 production call center. [Funding; Operational Reliability]*
7. *Completion of the FCC mandated public safety radio rebanding process to ensure that the County is able to support dependable communications on the newly provisioned radio frequencies in concert with other regional public service agencies (Funding; Operational Reliability).*
8. *Support the future phases of the key TechMod programs; Human Capital Management, Human Resources, Payroll, Self Service and Warehouse Management. Leverage the enterprise model in support of the county's Health and Human Services modernization program in concert with the national direction on Electronic Health Records (EHR) and inter-agency Health Information Exchange (HIE). Continue to identify opportunities for combined infrastructure support and innovative methods for long-term support. [Funding; Staff Resources]*
9. *Continue improvements to the IJIS program including the production implementation of the CRIMS System – Moderate and manage the transition of the final key components that will result in the full retirement of legacy mainframe criminal information systems, while augmenting and enhancing the initial project deliverables. [Funding; Staff Resources]*
10. *Digital upgrade of cable communications cablecasting – Completion of public, educational and government digital upgrade to enable County technical management of 11 local cable channels, digital transmission improvements, automated outage and signal degradation monitoring, and program simulcasting. [Funding; Staff Resources]*

#### *Process Improvement*

1. *Continue the refinement of the Enterprise Public Safety Systems Modernization plan to identify the implementation phases to fully upgrade public safety and other technology systems. Department leadership as well as technology support staff will continue to follow the long term strategic plan, inclusive of state and regional interoperability that will pave a methodology and develop the formal governance model as the County and regional organizations transition to the modernized solutions.[Public Safety and Operational Reliability]*
2. *Continue development of Enterprise Project Management standards, tools and templates following the enterprise Project Management Methodology (PMM) to ensure projects are implemented on-time, on-budget with constant emphasis on scope and change control – Significant enterprise success requires review and adoption of the revised enterprise PMM process and implementation of quality gate controls to manage project scope [Operational Reliability].*
3. *Continue the modernization partnership with Health and Human Services to ensure new, consolidated solutions will transition integrate with the enterprise structure, meet business requirements for current/future processes, enable mobility solutions and be architected as a low cost, sustainable solution with potential for expansion as services and program requirements evolve.[Operational Reliability and Customer Service]*
4. *Continue the development of the IT review assessment process including annual technology budget reviews as well as the interim CIO review assessments. Review and enhance, as necessary, the assessment scorecard process and review project outcomes of pilot projects to determine the effectiveness of the scorecard to predict the long term outcomes of the IT analysis process and documentation [Operational Reliability]*



5. *Continue to identify and consolidate duplications in technology services through inter-departmental and inter-agency review and cooperative exchanges – Requires evaluation and collaborative agreement on technology services in all departments and other county agencies with concurrence on baseline services, methodologies and standards. [Operational Reliability, Security and Access Control]*
6. *Continued development of Enterprise Identity Management (EIM) for the formal adoption of strategic and secure architectural changes to limit access to data and systems to as needed applications and customers [Funding; Safe and Secure Neighborhoods and Operational Reliability].*
7. *Monitor defined measures for Enterprise Project Management (EPM) – Continue the validation of newly created headline measures for EPM through overall enterprise project health criteria. Monitor schedule and budget targets to demonstrate the efficient use of time, money and resources on the County's enterprise projects relates directly to the County Executive's mission for Responsive and Accountable County Government. [Operational Reliability and Customer Satisfaction]*

#### *Technology Support and Resources*

1. *Continued review of internal services that don't align with core competencies and review additional outsourcing and shared services opportunities - Improvement in services can be noted by focusing on internal competencies and offsetting cost by selecting niche or new generation providers for alternative services. [Funding and Operational Reliability].*
2. *Continue to build on the FY09 skills analysis, FY10 assessments and FY09 – FY10 training opportunities to continue to develop staff training plans with the intent to minimize single point of failure, single threaded support as well as build succession plan for staff – Requires County supported re-investment in training and education of technical staff which in turn assists in reducing employee turnover, address staffing reductions, minimize the need and acquisition of specialty/contracted resources and associated ramp-up from project and staffing transitions. [Funding, Employee Stability and Performance].*
3. *Implement to the County Cable Montgomery (CCM) production structure - Review and assess cable services to ensure that Montgomery County's structure is sound and services growth can be addressed with the new collaboration model [ Funding, Employee Stability and Performance].*
4. *Develop a common, yet detailed, approach to modernizing asset management as well as IT Governance methodologies through the exploitation of existing IT leadership groups – Continued focus on both fiscal challenges and ongoing governance improvements (CARS, IPAC, ITPCC and TOMG) [Funding and Operational Reliability].*
5. *Formally develop leadership structure for Public Safety Systems Modernization – Continue the development of the business case and solution architecture for the next infrastructure effort to upgrade aging Public Safety Systems including radio, CAD and other companion solutions. [Funding; Customer Satisfaction Safe and Secure Neighborhoods]*
6. *Strategic Focus on Enterprise Systems Disaster Recovery – With the implementation of new enterprise systems and the retirement of legacy solutions using the mainframe, there is a need to re-engineer and implement changes to the disaster recovery methodologies. Core focus will be on redundant data capabilities, the use inclusion of more server based recovery services and the development of true Business Impact Analysis (BIA) for recovery initiatives and a definitive correlation between disaster recovery processes and activities that supports business continuity of operations (COOP) development and implementation. [Funding and Operational Reliability]*
7. *Federal Communications Commission Proceedings – Continued promotion of federal Digital Cable testing standards; qualitative federal cable customer service standards; initial federal broadband customer service standards; revised federal eRate, pole attachment, job creation focus of ARRA grant usage and broadband classification rules to facilitate continued financial growth and operation of FiberNet; and public safety spectrum auction rules that protect future public safety broadband applications.*
8. *Cable Franchise Renewals – Performance of community needs assessment for the future of cable services in the county, as well technical assessment and financial audit of Comcast and RCN cable systems in preparation for cable franchise renewals.*

## **Appendix A: Budget.**

### **FY12 Known Funding Elements / Projections**

The impact of the national recession continues to be an impediment to new and replacement technology plans and included yet another significant reduction in available operating funds. Despite the reduced appropriation, DTS has continued to address the budget challenge with dramatic reductions to our operating plan as well as many of the planned projects in the PMO “parking lot”. DTS believes that there is a significant amount of Return on Investment (ROI) that is being lost, but the investment funding required to glean the ROI has not been allocated. The reductions, continuing from the FY09, FY10 and FY11 reductions continue into FY12. DTS continues to leverage every opportunity where funding can be made available to utilize all newly developed solutions, shared services / resources, architectural changes and other infrastructure implementations to achieve a maximum effect on those departments or entities that can leverage these investments. Additionally, DTS took aggressive steps to discuss the fiscal conditions with every vendor, partner and service provider looking for ways to reduce costs. Many of the vendors have been responsive and a large portion of our overall operating reductions were the result of zero growth in maintenance, flat out reductions to contracted costs or restructuring of cost models to allow the County to maintain products or processes to minimize the impact on county clients.

The planned/approved FY12 operating budget is over \$ 9.3M less than FY11. As a part of this reduction, 8 core positions will be removed from the FY12 approved resource pool of 155. The resources removed from the organization primarily provided support to mainframe operations in the non-day shift time frames. With the implementation of the Oracle eBusiness solution, the implementation of the Financial and Human Resource management components, mainframe tasks have been significantly reduced. The remainder of the mainframe activities has been rescheduled to coincide with day shift personnel and after hours support has been automated. However the reduction already adds to the challenges for DTS’ ability to maintain support at record low levels for lesser priority initiatives. DTS continues to consider governance as a control to demand for non-critical priorities.

### **Technology Modernization**

- ERP Implementation (Phase IB – HR / Payroll) – The Department of Technology Services has been identified as one of the crucial factors in the overall success of the Oracle eBusiness solution, initially implemented in July 2010. The original plan for the ERP implementation was to structure the implementation using the best practice “50-50” model, utilizing half of the staff from the integrator resources and the supplemental half from the business organization. Early into the planning of the solution, shortly after the implementation of the test systems, it was clear that CIBER did not have the resources to adequately support the technical aspects of the initiative. A technical project manager was identified from the DTS team and was completely complimented by DTS resources to create the technical delivery team. In addition to providing near 100% of the technical resources, DTS standards and detailed assessment of integration direction challenged the CIBER plan for a number of the application interface integration methodologies. DTS recognized that the direction was following a route that would create extensive costs in the future when the outdated toolset would need to be updated. As a result, DTS work efforts in this direction, complimented by Oracle technical confirmation, convinced the team to utilize the more modern approach to interface as well as architectural development. DTS assigned resources also included a large contingent of “in-kind” resources to ensure the effort was successful and technology deficiencies within the integrator were obvious.
- MC311 Production Launch – DTS provided the necessary support to complete the implementation and production launch of the Siebel solution, coupled with the Avaya Computer Telephonic Integration (CTI) to launch the County’s first consolidated call center and the transition of the 3-1-1 digits to a centralized exchange. The Enterprise Telecommunications and Services Division provided continuous support to integrate the high end, computer integrated telephony solution to allow the call center process to include the most streamlined and work efficient service agent solution, enhancing and improving the Customer Service Agent workflow to the maximum efficiency. The Enterprise Server and Operations Division worked tirelessly to create a robust implementation of the Siebel solution to ensure high availability of the Siebel solution that provides the foundation of the MC311 information documentation and work management efforts. The Enterprise Applications and Solutions Division aided in the development of integrated applications as well as the crucial desktop management services required to keep system

configurations and the unique desktop programs available for call center agents. Overall, upon the final production launch, while there were some challenges during the implementation, Senior Montgomery Leaders clearly stated that none of the challenges through the compressed implementation were technical in nature.

- **Public Safety System Modernization (PSSM)** – Significant progress was made in FY11 on this effort. In the prior fiscal year, funding was provided for basic assessment of the overall project, the development of the project plan and a small cadre of radio replacements to begin the County's radio upgrade effort. After a thorough review of the Sprint/Nextel rebanding program alternatives, DTS staff, with support from OMB, Finance and the County Attorney's Office, developed a recommendation that took advantage of a funding contribution by Sprint/Nextel, aptly called "Payment-In Lieu of Re-Banding". This option removed Sprint/Nextel's obligation for "loaner devices" being provided to the County, while the older, obsolete devices were removed, reprogrammed and then re-installed in County emergency vehicles. The DTS cost analysis demonstrated that the County (users and equipment) would be required to "touch" each portable device twice for the rebanding effort and then up to two additional times when the County was able to fund new multi-band, multi-zone devices in the 2014-17 timeframe to meet the FCC narrow-narrow band requirements. As a result of the analysis, DTS and the Public Safety departments was able to assemble a package, requesting appropriation of \$24M which would allow the County to purchase all of the necessary devices to complete the rebanding, transitioning to new equipment (capable of the 2014-17 FCC frequency requirements), reduce the device "touches" to a single instance, save the cost of radio support maintenance for a full year and avoid the significant labor costs of the remaining 3-4 "touches", saving the County approximately \$6M over the next two years. The appropriation request was successfully presented to County Council, at which time \$21M was appropriated, requiring additional negotiations with Public Safety customers on the scope of equipment to be purchased as well as additional negotiations with Motorola on device and accessory pricing. As a direct result of cooperative work from the Public Safety users and Motorola, DTS was able to utilize the appropriation allowed to purchase approximately 4800 radios, exceeding the 4200 radios required for the re-banding requirement. This effort, not only places the County on a success path for meeting the re-banding timeline, but also puts device replacement for the remainder of the outdated and aging radios beyond the Public Safety realm. An action plan to redistribute the latest of the older units, after reprogramming, to the non-public safety users and disposing of the oldest and most costly to maintain equipment. Other aspects of the PSSM Program inclusive of Public Safety Radio Infrastructure; CAD Replacement; Station Alerting (Upgrade / Replacement); Communications interoperability have been developed into a more formal process toward the end of FY11. With the funding issues for the device replacement addressed, the FY12 budget addressed the development of the formal program, using the successful ERP/TechMod template. With continuing resources challenges and limited funding for the first full project year, DTS looked internally for a leadership model to continue strong momentum. As a result, DTS reassigned CTO to fill a leadership budget gap. The CTO has an excellent history of working with the Public Safety agencies and was eager to assume this temporary assignment to keep the program moving, continue the interdepartmental collaboration and manage the internal and external resource experts to address the near term deliverables identified in the project plan. As a direct result of fiscal and resource flexibility, the PSSM program has been enabled to achieve the success outcomes identified in the 2010 studies that highlighted the strategies and needs for public safety system improvement.
- **HHS Modernization Program Support** – DTS had a continuing role in the work with Health and Human Services, in conjunction with the modernization planning and pursuit of collaborative information that enabled HHS to be prepared for the 2011 launch of their modernization program. DTS participated in the business process review engagement, actively supported the project planning development ensuring the HHS Director followed best practice project management methodologies and was an active partner with HHS partners as well as assisting HHS with the technical modernization integrations with multiple State partners. A strategic success of the combined DTS/HHS partnership has been the development of a solution architecture that will potentially leverage "cloud based" solutions enabling HHS to solution integration and changes as early as FY12.

#### **Collaboration Efforts**

- **\$10M – One Maryland (FY10 ARRA Estimate)** – Broadband Expansion for anchor institutions and substantial completion of the remaining County elementary schools. While Montgomery County rallied with other Maryland jurisdictions to create a robust request, funding in the first round, anticipated to be part of the FY10 capital plan did not occur. As a second round attempt, the Maryland participants partnered

with the State of Maryland and have accepted some guidance from the NTIA on a reduced request and remain optimistic about an award that will provide for the planned outcomes from the original request. Funding decision, by law, are required by the end of September, 2010.

- Investments through UASI funding for the National Capital Region I-Net (NCRNet) are being realized as the regional consortium under the Council of Governments begins to utilize the network for production, interoperable communications solutions. Beginning in FY11, discussions and impacts of the long-term operating costs are finally being defined. The impact of continuation, at the consortium participant's responsibility is currently projected for assumption for FY14 budget, future fiscal impacts. An operating plan is being developed to define the distribution responsibilities should UASI firmly change their operational support funding in this time frame.
- CARS Initiatives – In early FY11, County Council established the Organization Reform Commission (ORC) with the explicit objective of looking at County Government and utilize citizen subject matter experts to propose recommendations to both County Council and the Executive branch for business change, with a centric goal of finding ways to cut costs. An outcome of the ORC was the formalization of the Cross Agency Resource Sharing (CARS) initiative. The CARS initiative established a number of working groups, including Information Technology, to look at new ways or business acceptable alternatives to promote and execute inter-agency objectives. IT was instrumental in the early stages as the ITPCC, a cross agency governing body, already had a County supported charter to look at interagency technology strategies. While the ITPCC primarily focused on the developing "pilot" programs for evaluation and future funding opportunities, the ITPCC presented the governance template that was replicated by the CARS executive committee at the recommendation of agency IT leadership. As a direct result of this recommendation, the ITPCC subsumed the responsibilities and obligations of the CARS IT committee, presenting program support options that were obligatory of this inter-agency group.

#### **Appendix B:** Implementation.

1. **DOT SnowMap Implementation** – With the winter of 2010's unprecedented storm and subsequent to a national search for a solution to update the County's snow plowing progress and communicate snow removal activity during a real time event, DTS' recommendation to develop a custom application was accepted by the Department of Transportation. In just seven short months, requirements were developed and a new solution was implemented in November of 2010. The DOT team was provided with a dynamic solution that allowed DOT staff to update road snow maintenance status, validate information to the field and simultaneously update the public facing web page to keep citizens informed about snow removal, including information about surrounding neighborhoods to allow residents to make decisions about venturing out during these weather events. Upon completion, implementation and active use, DOT sponsors claimed that not only was this tool better than the multi-million dollar solutions reviewed, but it provided more flexibility and agility than any tool they had considered from a national search. The new solution uses the existing DTS GIS toolbox, follows current standards and has been identified as a foundational element for future DOT events including summer storm responses and other events that require road level detail.

Other significant projects developed within the Enterprise Application and Solutions Division include:

- Performed analysis, documentation and development for ERP Interfaces and Data conversions. Produced data mapping and conversion extracts for HCM, payroll and retiree payroll. Worked with the ERP Project team to load and validate the legacy HCM and payroll data. Produced detailed specifications and provided example files for all ERP interfaces. Worked with the ERP Project team to test and validate the Phase 1B interfaces.
- Implemented Human Resources Management System (HRMS) customizations to implement multiple labor agreements and complete migration to ERP
- Developed the Human Resources Management System (HRMS) ad hoc data extraction and historical reporting for many Public Information Act, Office of Human Resources and Department of Finance requests.
- Developed the Total Compensation Statement (TCS)

For the Desktop Computer Modernization accomplishments, the following were completed in FY11:

- DCM Program FY11 Performance Metrics included the following -
  - Number of Support Calls Received – 31,053
  - Number of Moves/Adds/Changes – 405
  - Number of Non-seat repairs – 231
  - Number of total County Assets requiring DCM Support – 11,417
- DCM continues to manage a world class support function with the following results for FY11 -
  - % Help Desk Calls Resolved on 1<sup>st</sup> Call – 99.13%
  - Average Seconds to Answer Help Desk Call – 7 seconds
  - Average Monthly Call Volume – 2588
  - Average Ticket Quality (internal Q/A) – 97.88%
- Deployed an average of 119 security patches per PC (FY10, this number was 65)
- Password Resets – Starting July 1 2011, password reset will no longer be handled through the IT Help Desk. Implemented process requirements for mandatory user enrollment into Password Station. Successfully upgraded Password Station to the latest SQL database and new less ambiguous security questions were added.

2. **PMO Dashboard and Scorecard Assessment** – The Department of Technology Services continues to improve with the implementation of the project management dashboard using five key project assessment factors (budget, schedule, issues, risks, scope). DTS Senior Management worked with the continued assistance of the Enterprise PMO office has successfully monitored progress of crucial enterprise projects to ensure activities and issues are statistically monitored as complex projects are implemented. The dashboard is preceded by project reviews that leverage the same factor analysis to assist the Office of Management and Budget as well as Department Directors with a scorecard illustrating project viability and a better sense of success. With the scorecard and the subsequent dashboard, the metrics link to the Executive's key mission objectives. The response by Department Directors to the assessments has been positive and the projects that have been subject to the processes continue to show on-time implementation and well-managed budgets.

Other accomplishments of the Enterprise Services and Strategic Planning (ESSP) team were:

- Delivered the District Court Feed to the State's Attorney's Office, which provides nightly case updates including new cases, new/updated case events, defendant information, witness information, charge information and case dispositions.
- Provided project management and quality assurance support for two major releases (5.3, 5.4) of the SAO Case Management System (JustWare application) identifying show stopper defects in each release. The work done on the part of the County resulted in the vendor (New Dawn Technologies) revising their release schedule to 2 major releases a year with minor releases provided for defect resolution.
- Provided quality assurance support for the development and initial release of the CRIMS application supporting critical jail management functions for the Department of Corrections and Rehabilitation (DOCR).
- Provided project management and quality assurance support for the Enterprise Resource Planning (ERP) test automation team in support of the project deployment of Phase 1b
- Provided quality assurance and testing support for the operations of the MC311 Call Center, including maintenance releases of the Siebel software.
- Provided project management and leadership for the operations of the enterprise Mctime system, include the rollout of the system to all remaining departments in FY11. In addition, significant system changes to Mctime were required to support the ERP system Human Resources rollout (Phase 1b).
- Provided project management and leadership for the development and release of the Storm

Operations Map (SnowMap) for the Department of Transportation. The new Storm Operations Map provides citizens a graphical view of the real-time status of snow removal in the County during large snowstorms.

- Completed the Annual IT Review process for the FY12 budget cycle. This process is an evaluation and ranking of IT project requests from all County departments.
- Completed support for the MCG IT Initiative Portfolio. This project portfolio reports common budget and schedule metrics on all active IT projects and feeds into quarterly metrics reported to CountyStat. The project portfolio provides a common framework for greater accountability and transparency on IT projects.
- Completed a major upgrade to the Project Management Methodology (PMM). The PMM documents the standards and practices used by the County in successfully managing our IT projects.

3. **IJIS Implementation Continues** – The County's Integrated Justice Information System continues on a positive trend, implementing the component solutions with the benefits of modern technology, system information interoperability and access.

- CRIMS – The first phase of the inmate processing system was implemented at the end of FY11. In essential response to budget recommendations by the Department of Corrections and Rehabilitation, with a recommendation of staff reductions, it was crucial to implement the first phase to automate inmate intake. While the July 1 implementation had challenges, involved DOCR and MCPD staff as positive and clearly the automation solution of the future for corrections.

4. **Telecommunications and Network** – Following multiple years of planning and effort, the Enterprise Telecommunications and Network Services Division (ETSD), completed Phase I of the enterprise voicemail system. The year began with the vendor negotiations and contract development to ensure a smooth cutover to the new voicemail system, replacing the aged and failing solution. The first cutover took place at the end of FY11 with multiple cutovers to take place, finishing the upgrade in FY12.

In addition to voicemail efforts, despite the significant reductions in the telecomm resource pool, the following items are notable accomplishments for the ETSD team:

- Multiple cutover and conversions including DFS from digital to IP telephony; phone cutovers for Tacoma Park and Germantown Fire Stations; Mod-County Recreation Center; Brookville Service Park; Gaithersburg Interim Library
- Instituted in-house efficiency worksheets
- Validated 13 Program of Requirements for DGS CIP Projects
- Created DTS Telecommunications IT Specification and Infrastructure Standards Document
- Established 24X7 support for DLC IVR system
- Transitioned and automated monthly call reporting for County distribution
- Created documentation to allow TSA's to edit departmental call accounting data
- Documented and taught PBX services how to support the Department of Liquor Control's Interactive Voice Response application.
- Enabled Avaya Access server to be backed up for disaster recovery
- Changed over a 1,000 names, phone numbers, index codes in Call Accounting
- Helped Transit complete its requirement review of the IVR portion to ATIS, successfully, obtained a vendor and services to accomplish IR implementation.

- Generated hundreds of customized reports for TSA requests and investigations
- Network Services (NS) continues to manage the internetworking of over 1,000 devices connecting 423 sites with another 138 in the construction pipeline, adding 22 new sites to the FiberNet solution, with 138 sites in the FiberNet Pipeline, 11 are almost finished and ready to place on-net.
- Executed the Procurement RFP Process to acquire frame-relay or other transport services with a lower cost alternative to Verizon to connect over 100 small office sites
- Cutover 13 AVAYA sites using Branch-Extenders to FiberNet II resulting in a savings on Verizon circuit costs of over \$180,000 per year
- Performed a proof of concept project to use Ethernet-T1 emulation to replace Verizon voice circuits on the County's voice backbone. This proposed project will use Circuit emulation technology and is expected to reduce the Verizon annual invoicing by \$450,000.
- Moved all Fire stations FiberNet II from the older Fibernet I technology to improve speed and reliability
- Pioneered the use of Comcast Cable modems with state-of-the art firewall appliances as a replacement for Verizon Frame-Relay circuits
- Improved Internet DNS recovery for Montgomery County Government by asking Atlantech Online to provide secondary DNS services from their Internet DNS

5. **Enterprise Security** – The DTS team migrated to Google Enterprise (Gmail, Docs, Sites, Video, etc.) for mail, collaboration, and document creation for both internal and external contacts to test the challenges of a potential for a County based transition to cloud based solutions and the associated security controls and issues. The team began developing simple applications and applets under Google infrastructure to integrate various Security Team enterprise cloud systems.

The County Security team was also asked to lead Maryland's effort for Securing Our eCity, which is a public/private partnership to foster security awareness training for kindergarten through grade in order to help reduce online theft, fraud, and increase online safety for children.

Additionally, the team developed and implemented the Security Team Modernization Project. It's components are comprised of:

- Mapping models for including cloud vendor strategies
- Building a Google Site for each security Team business process to ensure repeatable processes, standardization and disaster recovery
- Identifying and documenting the challenges with moving sensitive data from the current legacy systems to a FISMA certified (to NIST medium) and SAS 70 documented cloud solutions.

6. **County Cable Montgomery (CCM)** – The Cable Office continue to partner to facilitate transmission of original local programming on CCM. This programming includes live traffic camera coverage, live programs from CCM facilities, live programming originating from remote locations, live to tape productions as well as fully produced and edited programs. All programming was closed-captioned in English and a few programs were also closed-captioned in Spanish. As a part of our continuing improvements, programming has been moved to a new system which allows for improved access and archiving, making CCM telecasts more accessible to viewers in an on-demand format via the County's Website. Other accomplishments and achievements for the station and Cable Office include:

- The Cable Office-supported Transmission Facilities Coordinating Group provided engineering analysis and processed 192 wireless transmission facility antenna and tower siting applications. The review process was streamlined and, on average, each application was processed within 36 days in FY11, which was a 10% improvement over FY10 processing times.
- CCM provided 2,964 hours of first-run local programming, which included closed captioning for 100%

of English-language programming and closed captioning of County meetings and special events in Spanish.

- Worked with other public, educational, and governmental access stations to provide the first ever local county live television coverage of the Maryland Gubernatorial Primary and General Election races and production of 50 weekly episodes of the local news program, "County Report This Week."
- Implemented use of a third-party web-streaming and meeting management system, Granicus, which will now permit multi-year archiving of CCM programming (including Council sessions), simultaneous viewing of live Internet streaming of CCM programming by an unlimited number of viewers, and a video indexing feature that will permit viewers to select topics on Council agendas and be automatically directed to the portion of the video that contains discussion of that agenda topic. Granicus also allows closed-captioned Internet video streaming, Open Government-mash-up copying and sharing of legislative worksession videos, and will enable mobile viewing applications in FY12.

Awards received for our CCM station this period include:

- National Association of Counties Excellence Award for the Public, Education, Government Access and Monitoring Network
- Eight National Association of Telecommunications Officers and Advisors Government Program Awards
- Two Pegasus awards for exceptional video production
- Association of Marketing and Communications Professionals Gold Award for Television Programs

7. **Cable and Broadband Regulatory and Legislative Leadership** – DTS' Cable Office continues to provide leadership and advocacy on behalf on the County and residents to ensure compliance with cable franchise agreements, protection of cable and broadband subscribers' interests, reasonable and efficient management of telecommunications tower and antenna siting, and development of state and national policy that recognizes the key role of local governments as community broadband providers, the value of local cable programming, and protection of consumer interests in broadband and cable communication policy.

Additionally, the Cable Office has taken full oversight responsibility for the County's continued partnership for the Inter-County Broadband Network participation. This highly complex process has made strides in the past year developing the governance model, memorandums of understanding and continually assessed the activities and obligations required to complete the program activities, both in line with the National Telecommunications and Information Administration (NTIA) grant requirements as well as meeting implementation obligations from the significantly short timeline.

As a result of this year's efforts, numerous accomplishments can be noted.

- Assisted consumers with a total of 1,021 formal complaints, resulting in \$79,696 in refunds and credits for cable and broadband subscribers.
- Inspected 9.869 cable construction and installation work sites. This inspection of 23% of work locations improved cable operator compliance from 85% in FY10 to 98% in FY11.
- Provided significant support for a successful \$115 million Maryland application for an American Recovery and Reinvestment Act broadband grant. The grant will result in construction valued at \$14 million to expand FiberNet to 80 elementary schools, 19 HOC sites, and 1 public library.
- Filed comments with the Federal Communications Commission in the Video Competition, Navigation Device, and Broadband proceedings regarding rising cable prices, impact of service bundling, need to implement sale requirement to allow subscribers to purchase converter box equipment, use of County FiberNet to provide high bandwidth/low cost broadband, e-rate program reforms to enable local governments to receive federal e-rate funding for provision of broadband and telecommunications services to schools and libraries, subscriber complaints related to broadband deployment, efficiencies in government review and approval of tower and antenna siting applications, and difficulties obtaining access to utility poles to deploy broadband services.



8. **Ad Hoc and Planned Application or System Improvements** – The Department of Technology Services has continued the trend of proactive and timely support for business departments by upgrading, updating and completing business needed computer applications and other technology solutions.
- IT Documentation Improvements – Montgomery County departments and systems have become significantly dependent on DTS' continued focus on documenting the technical architecture used to deliver and maintain services. Over the past year, and as a result of the success in providing accurate and extensive technical documentation for the Enterprise Resource Planning, DTS continues to develop and distribute comprehensive architecture documentation. As a direct result of this component in DTS, departmental and enterprise IT staff can share information with vendors and other service providers to ensure that technology recommendations and proposals align with the county plans and strategies, subsequently limiting new risk or asynchronous implementations that will yield additional costs and solutions that do not meet final outcome expectations.
  - DTS Transparency Communication - DTS has leveraged the tool for the online chat used by the County Executive to host live Q&A sessions to allow county employees to make inquiries about IT strategies, policies and technology direction. The first of these events was successfully held, with over 30 questions asked, prior to or during the event. Feedback from the event indicated that employees felt a higher level of openness and transparency by DTS and also indicated a desire to continue the dialog as new technology opportunities present themselves.
  - Enterprise Web Filtering Replacement – DTS replaced the enterprise URL filtering solution with a highly cost effective cloud based solution. This effort saved the County over 50% in maintenance fees, cut system administration time significantly while still allowing the small team to provide information and effective reporting about internet usage as needed.
  - Virtual Private Network (VPN) Upgrade –DTS performed a major upgrade of the remote access VPN solution. This upgrade adds new features that include support for various handheld/smartphone solutions as well as other portable technologies.
  - Document Management – DTS continues to support efforts surrounding the development and enhancement of an enterprise process for long term document management. DTS has become an integral part of the deployment of ZylImage as the county's central solution for image management, incorporated into the various business solutions. ZylImage has been integrated into the ERP Accounts Payable, JE/GL voucher functions as well as being the image front end solution for DGS' records management methodology allowing user to manage enterprise archived records.
  - Enterprise Applications Initiatives and Support – DTS continues to be an integral part of the launch of new business applications that improve efficiency and support business outcomes of various departments across the enterprise. In addition to the ongoing support, management and operational oversight of the legacy business systems, EASD has had a significant impact on the use of the Web for the delivery of information as well as creating a conduit for service solutions. In addition to basic web site support, the following are examples of web solutions completed in FY11:
    - DOT Street Light Outage Reporting – Administrative tool and Public viewer
    - Granicus Deployment – Supporting the CCM and Council website redesigns
    - HHS Vaccination Appointment Booking and Online registration application
    - MCFRS Transfer Request Management Solution
    - Board of Elections Early Voting Dashboard
    - DEP Solid Waste Hauler/Collector Billing Enhancement effort
    - DOT Rockville Core Parking application
  - General GIS Improvements – The GIS group provided numerous updates to key County systems that encompass GIS as a core component:
    - Bikeway PDF Map and Map Viewer
    - MC311 Updated database maps

- Regional GIS Collaboration
  - Maryland State GIS Committee
  - Maryland PSIC for GIS data sharing standards
  - NCR / COG for Regional geospatial data sharing

## 9. National Recognition

- Center for Digital Government (NACo) – Submitted the County's response to the annual survey and achieved recognition as the “***Number Three Digital County in the Nation***”, with more than 500K residents. This continues to represent the cumulative achievement for the County, not just a Technology Services accomplishment. The 2011 evaluation continues to be based on business impacts through technology automation, the strategic alliance of technology to business need and the transparency for progress, practice and accomplishment beyond the walls of the organization. Despite the significant reduction in operational budgets, this demonstrates that Montgomery County continues to be a national leader in the use of technology.
- NACo Recognition
  - a. CountyStat Performance Dashboard
  - b. Department of General Services – Contract Search System Implementation
  - c. Automated Systems Management
  - d. Cloud Security Architecture and Enterprise Offering
  - e. Internet County Contract Search
  - f. PEG Access and Monitoring Network
  - g. Storm Operations Management Map
- Public Technology Institute
  - a. Web 2.0 Awards
    - *Web Technology and Social Media Tools*
    - *Vehicle Accident Report Purchase System*
  - b. Public Safety - *GIS Platform for Emergency Management & Response: Common Operational Pictures (COP)*

## **Appendix C:** Data Development Agenda.

1. **Data Center Modernization and Failover** – Continuing work with the Department of General Services (DGS) from the prior year of planning and early infrastructure wiring replacement, the first phase of new solution implementation was completed late in FY11. The project is expected to be completed in FY12 to ensure the expanded computing needs from the Enterprise Resource Planning production launch, the implementation of the MC311 CRM solution and the continuing effort to house high priority systems in a protected environment can be included within the existing square footage of the county's data center.

While DTS is continuing to incrementally upgrade the physical architecture in the primary data center to high availability infrastructure to ensure information and system continuity. Budget constraints necessitated a reduction of permanently installed servers at the Disaster recovery site to a minimum core set. This approach provides the most redundancy for the most likely outage scenarios, and limiting of cost of redundancy for less likely events, while maintaining a foundation for a complete data center loss disaster recovery event.

## **Responsive and Sustainable Leadership – Accomplishments and Planned Results**

1. **Collaborations and Partnerships:** Department actively participates in collaborations and partnerships with other departments to improve results beyond the scope of the department's own performance measures.

*MCG Departments*

1. *All Departments (Continues) – TOMG (Technology Operations Management Group); Alignment of Department IT Managers and Subject Matter Experts with DTS strategies, architecture and operational management.*  
 Program goals:
  - *Develop strong work relationships*
  - *Create formal communications process for similar functions in DTS with Department staff*
  - *Development of governance model and initial efforts on the design of a sustaining organization to ensure standardization and formalized processes can be maintained*
2. *Health and Human Services (In Progress - Continues) – Development of business process and validation of departmental systems in support of departmental business initiative changes and re-engineering.*
  - *Business process review, mapping, assessment and documentation to begin the business/technology transformation effort.*
  - *Develop national expert engagement with human services experts and refine DHHS solutions that support the “no wrong door” mission through technology support and enhancements*
  - *Participation in the Multi-Jurisdictional forum, with both a consortium of parallel agencies as well as a nationally recognized consultation service to begin the development of a demonstration project that will give Montgomery County the attention deserved as one of the leading Public Sector agencies promoting the use of technology along with business process re-engineering to improve Health Care and Health Services offered at the local level.*
3. *Finance (Completed)*  
*Implementation of the MCtime, automated employee timekeeping*
  - *Improvement to and validation of employee time submission to a single pay rules engine*
  - *Compliant and supportive of “green initiatives”*
  - *Completed and production roll out to all MC employees, Q2-FY11, prior to the formal implementation of the Oracle eBusiness HR/Payroll solution.*
4. *Executive Administration (Ongoing)*  
*Continued support for transformation through Technology Modernization*
  - *Enterprise Resource Planning – Phase IB, Human Resources and Payroll, implemented December 2010, producing employee payroll for calendar year 2011.*
5. *Joint optimization or co-location of County Data Centers and support staff into a single facility (In Continued - Deferred)*
  - *Resumption of the County’s Business Application Portfolio through a detailed Business Impact Analysis (BIA). Detailed follow-up assessment has been developed to begin the collection of “drill down” information to assess the priorities of existing systems in use by the county, the current gaps in continuity of operation and overall cost analysis in current format.*
  - *Continued development of the Online Portfolio Management tool presenting information collected from the ERP Portfolio Assessment, to be combined with BIA information discovery.*

#### *County Agencies*

1. *Maryland National Capital Park and Planning Commission (MNCPPC) (Continued) – Joint program to address inter-agency use, strategy and enterprise advancement of Geographical Information Systems (GIS)*
  - a. *Completion of the GIS Strategic Plan across all Montgomery County agencies*
  - b. *Implementation of the GIS User Governance Board*
2. *Public Schools (Continues)*
  - a. *Ongoing development of Fibernet requirements and prioritization for the completion of MCPS Elementary Schools for high speed, improved bandwidth to central IT systems.*
3. *PEG Network (On-Going)*
  - a. *Continued collaboration with private sector, inter-jurisdictional and inter-agency broadcasting and communications development*

- b. *Continued synergy development with PEG operator for technology improvements and resource sharing*
- 4. *Transmission Facilities Coordination (Continues)*
  - a. *Inter-agency support and coordination of communications tower application review and processing for new projects and commercial ventures.*

#### *Inter-Governmental*

- 1. *One Maryland Broadband Initiative – Collaborative continues between 24 Maryland Counties and the State to execute the plan from the award of the American Recovery and Reinvestment Act (ARRA) funding for the continued deployment of fiber optic connectivity to achieve a new plateau in resident access to high speed broadband. Montgomery County has approximately 15% of the overall funding allocated and is represented on the Inter-County Broadband Network (ICBN – County consortium within One Maryland) governance committee.*
- 2. *National Capital Region (Continues) – Development of Inter-Governmental Solutions for Data Sharing and Communications*
  - a. *NCRNet – Fiber interconnect between MD, DC and VA government networks*
    - i. *Proof of Concept complete*
    - ii. *Application implementations – Video Teleconferencing – Complete; CAD-to-CAD – In Progress; Shared GIS – In development and requirements process for the County PSSM initiative for CAD modernization*
  - b. *Data Exchange Hub (DEH) – Standards development for the base architecture and governance model that enables the development of applications utilizing the federated model for data sharing data between jurisdictions.*
    - i. *Monitor the successful implementation of the Virginia jurisdictions in the CAD to CAD data exchange model*
    - ii. *Begin the implementation of the requirements pursuant to milestones for the Maryland funded (PSIC) GIS data exchange model.*
- 3. *National Alliances for Public Safety Communications Interoperability*
  - a. *Telecommunity – Focus group on activities of the FCC on National Wireless communications plan*
    - i. *Public Safety Radio Re-banding*
    - ii. *Acquisition and support of D-Block radio spectrum (700Mhz) for National network*
    - iii. *Defeat of commercial-public safety “flexibility” proposals that would require public safety to share spectrum with commercial users.*
  - b. *Maryland State Interoperability Executive Committee (SIEC) participation*
    - i. *Statewide 700Mhz Radio System Implementation*
    - ii. *Statewide CAD Implementation*
  - c. *All Hazards Consortium (National Capitol Region) Executive Steering Committee*
- 2. **Workforce Diversity and MFD Procurement:** *Department actively participates in recruitment of a diverse workforce, and enforcement of MFD procurement requirements.*

*The Department of Technology Services continues to be proactive in the areas of workforce diversity as well as concentrating on the increase utilization of MFD vendors and sources.*

*As demonstrated again this year by the results provided by the Procurement Office, DTS trends continue upward for the use of professional services by MFD vendors as well as acquisition of technology commodities from MFD identified providers. An update to the professional services contracts completed in prior years, DTS has coordinated the development of a specialized professional services contract to attract local contractors and MFD providers for the sustaining support of the new enterprise systems. This program was developed to ensure that the unique skills for future changes and upgrades would be readily available through local resources and the resultant costs would be significantly lower than an approach with Tier 1 integrators.*

*With regard to workforce diversity, DTS leadership members continue to follow the guidelines developed by the Office of Human Resources to create an environment that ensures the candidate pool is cognizant of the benefit of the selection of diverse candidates to contribute to the success of a long-term support organization.*

3. **Innovations:** Department actively seeks to be innovative in its efforts to improve performance.

*The Department of Technology Services continues to demonstrate the ability to be innovative in technical areas as well as business integration and support. This was clearly demonstrated in the continued Digital Counties recognition, which focused on the use, prioritization and development of the Technology and innovation based on business goals and outcomes.*

*Additionally, the “enterprise think” methodology continues to escalate in the continuation of the Transform MCG as well as the Public Safety Systems Modernization plan. The teamwork approach that has been widely demonstrated in the past four years continues to align current challenges, defined needs and validation of gaps in solutions that led to the development of the numerous systems and created stronger alliances between Senior leaders as well as departmental subject matter experts.*

*Innovative approach was also demonstrated through the unified application for ARRA grant funds by the Maryland Consortium of Counties, the continued progress for the completion of the institutional network in concert with the National Capitol Region (NCR) jurisdictions and most recently the innovation in the regional GIS partnerships across the COG jurisdictions.*

4. **Effective and Productive Use of the Workforce/Resources:** Department actively works to effectively and productively use its workforce/resources, including, but not limited to, better management of overtime, implementation of productivity improvements, reduction of ongoing costs, and efficient use of other resources.

- 8.6% decrease in overtime hours used

*The Department of Technology Services continues to demonstrate its ability to effectively use resources in a creative and constructive fashion. As a direct result of the fiscal challenges of the past three years, the DTS leadership team has had to continuously evaluate and re-prioritize resources to meet the increasing demand for services, with the additional reduction anticipated in FY12. With staffing reductions exceeding 35 positions, DTS has had to streamline activities and re-organize the remaining staff to address the most crucial operational issue, provide in-kind resources for key enterprise projects and address mission critical new technology efforts.*

5. **Succession Planning:** Department actively plans for changes in its workforce, in order to maintain continuity of services, develop staff capabilities, maintain, knowledge transfer, and enhance performance.

*The Department of Technology Services actively reviews workforce and skills to maintain resources that will provide for long-term, progressive performance. As indicated prior performance reports, our efforts began several years ago with a department wide skills assessment and has continued on a routine basis as part of our frequent staffing matrix discussion at leadership meetings.*

*Despite the resource reductions required over the past three years, DTS has continuously supported technology staff to these highly visible programs, with only minor disruptions or impacts to standard service levels. The impact of the multi-year reductions will continue to impact this process and unexpected losses, additional workload and unmanaged expectations will likely have an impact on services as well as DTS’s significant improvement over the past three years in improved customer satisfaction ratings.*

- Identification of key positions and functions that require succession planning, and the development of plans is in progress.

6. **Internal Controls and Risk Management:** Department actively assess its internal control strengths, weaknesses, and risks regarding compliance with laws and regulations, recording of financial transactions and stewardship over the County’s assets. As subset of this goal, each department also manages risk pertaining to improvement in workplace safety, decrease work-related injuries, and reduce County exposure to litigation.

- No internal audits have been performed within the 12 months.

*The Department of Technology Services remains cognizant of the use of controls and risk assessment / mitigation. DTS continues the emphasis on physical controls and logical controls inclusive of technology decisions and direction as well. This has been evidenced through the results following the prior year fiscal reductions after a planned risk assessment. The successes evidenced through this process continue to be identified through the minimal impact of the last three years of reductions that continue to challenge support and continuity in FY12.*

*DTS continues to focus on risk management and controls based on the policy and process improvements made in FY11 in the Project Management, Security and desktop delivery areas. With the support and guidance from peer leadership through IPAC, DTS demonstrates that it has departmental philosophies, needs and priorities in the forefront of technology and support planning.*

*With regards to workplace safety, while the business environment is primarily low-risk office operations, DTS staff continues to focus on those nominal hazards that need to be maintained appropriately to avoid unplanned resource challenges. DTS staff has not experienced any major work related injuries and this is as a direct result of the safety conscious atmosphere maintained by DTS leadership.*

7. **Environmental Stewardship:** Department actively makes appropriate changes to workplace operations, workflow, employee behavior, equipment use, and public interactions to become more energy efficient, reduce its environmental footprint and implement other environmentally responsible practice.

*The Department of Technology Services is a steadfast advocate of maintaining improvement processes relative to the environment. In addition to past practices with the aggressive implementation of "Virtual Servers", DTS has stepped up to focus on a "green environment" in numerous areas. DTS continues to see benefit from the enterprise policy established to shutdown all PC's on a weekly basis for weekend power use savings. While one of the original requirements of the shutdown included the ability to ensure that workstation patches and fixes could be applied, the power savings from the shutdown was an optimal result as well.*

*Additionally, DTS has been a creative partner in the County's environment improvement plan through its paper usage and reduction plan. In addition to reducing internal needs for paper consumption, the change to all network printers capable of printing duplex, DTS continues to show significant improvements in overall paper usage as a department.*

*DTS also continues its environmentally friendly activities in the desktop environment. The current and ongoing contracts for desktop replacement, these contracts include a disposal process which follows national recycling and redistribution of technology.*

8. **Mandatory Employee Training:** Department systematically monitors and actively enforces employees' mandatory and/or required trainings.

- *23% of 128 department's employees have fulfilled all mandatory County/State/Federal training requirements.*

*Noting that a major contributing factor to the lower than desired fulfillment rate is the need for periodic refresher training for Preventing Workforce Harassment. The department will follow up with staff to complete the refresher training.*